

WHAT IS CLAIMED IS:

1. A truck mounted attenuator comprising:
 - an interface structure comprising a pivot mount at a first location and a bearing surface at a second location vertically spaced from said first location, wherein said pivot mount is adapted to be pivotally mounted to a pivotable truck component and said bearing surface is adapted to slidably engage an understructure of the truck;
 - a backup structure pivotally mounted to said interface structure at a third location and engaged with said interface structure at a fourth location spaced from said third location; and
 - a crash cushion supported at least in part by said backup structure.
2. The truck mounted attenuator of claim 1 wherein said backup structure is releasably abuttingly engaged with said interface structure at said fourth location, wherein said backup structure is pivotally mounted to said interface structure at a horizontal pivot axis at said third location, wherein said backup structure and said crash cushion are pivotable about said horizontal pivot axis between at least a first position and a second position, wherein said backup structure is engaged with said interface structure at said fourth location when said backup structure and said crash cushion are in said first position and wherein said backup structure is disengaged with said interface structure at said fourth location when said backup structure and said crash cushion are in said second position.
3. The truck mounted attenuator of claim 1 further comprising a shim mounted to one of said backup structure and said interface structure at said fourth location and engaged with the other of said backup structure and said interface structure.
4. The truck mounted attenuator of claim 1 wherein said interface structure comprises a plurality of vertically spaced third locations, wherein said

backup structure is releasably, pivotally mounted to said interface structure at one of said plurality of third locations.

5 5. The truck mounted attenuator of claim 1 wherein said interface structure comprises first and second horizontally spaced and vertically extending uprights, and wherein said pivot mount and said bearing surface comprise at least a first and second pivot mount and at least a first and second bearing surface formed on said first and second uprights respectively.

 6. The truck mounted attenuator of claim 1 wherein said pivot mount has an elongated, vertically extending slot.

10 7. The truck mounted attenuator of claim 1 wherein said pivot mount has an opening with an upper portion having a bearing surface and enlarged lower portion.

 8. The truck mounted attenuator of claim 1 wherein said interface structure comprises a yoke defining said pivot mount.

15 9. The truck mounted attenuator of claim 1 wherein said bearing surface is an outwardly curved surface.

 10. A truck outfitted with an impact attenuator comprising:
 said truck having an understructure and a pivotable element pivotally mounted to said understructure, wherein said pivotable element
20 comprises a support frame and a bed supported on said support frame;
 an interface element pivotally mounted to said support frame of said pivotable element and having a bearing surface bearing against said understructure; and
 a crash cushion supported at least in part by said interface element.

25 11. The truck of claim 10 wherein said understructure comprises a plate, wherein said interface element bears against said plate.

12. The truck of claim 10 wherein said interface element is pivotally mounted to said support frame of said pivotable element with at least one pivot pin.

13. The truck of claim 12 wherein said interface element has a vertically oriented slot engaging said at least one pivot pin.

14. The truck of claim 12 wherein said interface element has an opening having an upper portion having a bearing surface engaging said at least one pivot pin and an enlarged lower portion.

15. The truck of claim 10 wherein said interface element comprises first and second horizontally spaced and vertically extending uprights each pivotally mounted to said support frame of said pivotable element.

16. The truck of claim 10 wherein said interface element comprises a yoke, wherein a portion of said support frame is received in and pivotally mounted to said yoke.

17. The truck of claim 10 further comprising a backup structure pivotally mounted to said interface element at a first location and engaged with said interface element at a second location spaced from said first location, and wherein said crash cushion is supported at least in part by said backup structure.

18. The truck of claim 17 wherein said backup structure is releasably abuttingly engaged with said interface element at said second location, wherein said backup structure is pivotally mounted to said interface element at a horizontal pivot axis at said first location, wherein said backup structure and said crash cushion are pivotable about said horizontal pivot axis between at least a first position and a second position, wherein said backup structure is engaged with said interface element at said second location when said backup structure and said crash cushion are in said first position and wherein said backup structure is disengaged with said interface element at said second location when said backup structure and said crash cushion are in said second position.

19. The truck of claim 17 further comprising a shim mounted to one of said backup structure and said interface element at said second location, wherein said shim is engaged with the other of said backup structure and said interface element.

5 20. The truck of claim 17 wherein said interface structure comprises a plurality of vertically spaced first locations, wherein said backup structure is releasably, pivotally mounted to said interface element at one of said plurality of first locations.

10 21. The truck of claim 10 wherein said bearing surface is an outwardly curved surface.

 22. A method for mounting a truck mounted attenuator to a truck:
 resting said attenuator on the ground, wherein said attenuator comprises an interface element and a crash cushion supported at least in part by said interface element;
 15 pivoting a pivotable element of said truck from a substantially horizontal position to a tilted position, wherein said pivotable element comprises a support frame and a bed supported on said support frame;
 pivotaly connecting said interface element to said support frame of said truck while said pivotable element is in said tilted position; and
 20 pivoting said pivotable element from said tilted position to said substantially horizontal position and thereby lifting said attenuator off of the ground to a deployed position.

 23. The method of claim 22 wherein said interface element is pivotally connected to said support frame at a pivot axis, and further comprising sliding said
 25 interface element against said understructure at a location spaced from said pivot axis while pivoting said pivotable element from said tilt position to said substantially horizontal position.

24. The method of claim 23 wherein said understructure comprises a plate, wherein said sliding said interface element against said understructure comprises bearing said interface element against said plate.

5 25. The method of claim 24 wherein said bearing said interface element against said plate comprises bearing an outwardly curved bearing surface against said plate.

26. The method of claim 23 wherein said interface element is pivotally mounted to said support frame at said pivot axis with at least one pivot pin.

10 27. The method of claim 26 wherein said interface element has a vertically oriented slot engaging said at least one pivot pin.

28. The method of claim 26 wherein said interface element has an opening having an upper portion with a bearing surface engaging said at least one pivot pin and an enlarged lower portion.

15 29. The method of claim 22 wherein said interface element comprises first and second horizontally spaced and vertically extending uprights each pivotally mounted to said support frame of said pivotable element.

30. The method of claim 22 wherein said interface element comprises a yoke, wherein said pivotally connecting interface element to said support frame comprises inserting a portion of said support frame into said yoke.

20 31. The method of claim 22 further comprising pivotally mounting a backup structure to said interface element at a pivot axis and engaging said interface element at location spaced from said pivot axis, and wherein said crash cushion is supported at least in part by said backup structure.

25 32. The method of claim 31 wherein said backup structure is releasably abuttingly engaged with said interface element at said location.

33. The method of claim 32 further comprising a shim mounted to one of said backup structure and said interface element and releasably abuttingly engaging the other of said backup structure and said interface element at said location.

5 34. The method of claim 31 wherein said interface element comprises a plurality of vertically spaced pivot axes, wherein said backup structure is releasably, pivotally mounted to said interface element at one of said plurality of pivot axes.

10 35. A method for mounting a truck mounted attenuator to a truck:
resting said attenuator on the ground, wherein said attenuator
comprises a crash cushion;
 connecting said crash cushion to an interface element;
 pivoting a pivotable element of said truck from a substantially
horizontal position to a tilted position, wherein said pivotable element comprises a
15 support frame and a bed supported on said support frame;
 pivotally connecting said interface element to said support frame of
said truck; and
 pivoting said pivotable element from said tilted position to said
substantially horizontal position and thereby lifting said attenuator off of the
20 ground to a deployed position.